Date: Fri, 10 Sep 93 04:30:14 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V93 #42
To: Ham-Ant

Ham-Ant Digest Fri, 10 Sep 93 Volume 93 : Issue 42

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

Date: Fri, 10 Sep 1993 01:21:36 GMT
From: news.mentorg.com!mentorg.com!dand@uunet.uu.net
Subject: G5RV
To: ham-ant@ucsd.edu

In response to :
Jeffrey D. Angus:

:   Eh? two pieces of 50 ohm coax ran as shield balanced line are
:   terminated with 200 ohms, not 100.

N1AL wrote

 " Nope, it's 100 ohms. Think of the voltage across the load (assume
a 100-ohm resistor). The voltages from the two coaxes are 180
degrees out of phase and equal in amplitude. So the voltage at the
center of the resistor is zero volts. You could ground the center
of the resistor with no change in any of the voltages or currents.
This would make each coax terminated in 50 ohms, which is correct."

Wow, what a deal. If you have twice the voltage, and the same current
that means you have just doubled the power -- for free!! I think
Jeffrey is right - you get half the current, double the voltage for
4 times the resistance and of course, the same power. IE two 50
ohm coaxes in parallel gets you 200 ohms balanced.

--Dan KE0UR

Date: 10 Sep 1993 00:07:25 -0400
From: swrinde!gatech!howland.reston.ans.net!noc.near.net!news.delphi.com!
news.delphi.com!not-for-mail@network.ucsd.edu
Subject: G5RV
To: ham-ant@ucsd.edu

levine@mc.com (Bob Levine,x247) writes:

>...at the tail also, but by the definitions I have read, a center-fed Zepp
>is a contradiction in terms.

Don't know about the contradiction, but the 1993 ARRL Handbook shows both
a "center-fed Zepp" and an "end-fed Zepp". Kinda like the G5RV the
meaning has evolved. Is a G5RV a G5RV without the coax?...73, KG7BK

Date: 9 Sep 1993 09:30:01 -0400
From: sdd.hp.com!swrinde!gatech!howland.reston.ans.net!noc.near.net!
news.delphi.com!news.delphi.com!not-for-mail@network.ucsd.edu
Subject: G5RV
To: ham-ant@ucsd.edu

alanb@sr.hp.com (Alan Bloom) writes:

>...but after being transformed by the
>300-ohm twin lead, it becomes reasonably close to 50 ohms resistive
>AL N1AL

Al, take a look at my calculations and you will see that the above
statement is just not true. I know that you and half of hamdom believe
that it is true but physics calculations say otherwise. The transformed
impedences are nowhere near 50 ohms resistive.

Cecil, KG7BK

Date: 9 Sep 1993 19:22:29 GMT
From: jgervais@ucsd.edu
Subject: Helically-wound dipoles ??
To: ham-ant@ucsd.edu

In article <26kus0$rne@clarknet.clark.net> jaevans@clarknet.clark.net (John A. Evans) writes:
>I have seen articles on vertical helically wound antennas for hf bands but
>was wondering if anyone has seen articles or experimented with using
>horizontal helically wound elements for dipoles in the hf bands. My
>interest lies in space saving and low observable antennas that can be
>placed in an attic.
>
>I would appreciate any references or discussion on this _slinky_ aspect of
>160m-10m dipoles. The current ARRL Handbook and Antenna Book barely touch
>on the subject.
>
>thanks in advance !!
>
>---
>John A. Evans, Capt, USAF   "My number one goal as a
>VHDL/EDA Engineer   runner is to live long enough
>

I believe the April '92 issue of CQ had an article on constructing a helically-wound dipole. I built it and it worked reasonably well (of course you get narrower bandwidth, but it's not like my Tech+ license gives me much room to breathe on 40m anyway :-).

Overall performance was what I expected from a low dipole (clandestine operation from a condo, couldn't get it higher than 20' off the deck).

Good luck!

Joe Gervais   jgervais@ucsd.edu
KD6PRD ==> 13 WPM or Bust!

 "The largest hack begins with a single kludge."
                          - Not quite Confucious

Date: Wed, 8 Sep 1993 17:05:55 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!darwin.sura.net!news-feed-2.peachnet.edu!concert!inxs.concert.net!taco!straylight.acs.ncsu.edu!nsyslaw@network.ucsd.edu
Subject: J-Pole design/diagram needed.
To: ham-ant@ucsd.edu

Hi All!

Forgive me if this post is answered elsewhere, I haven't been able to find it as yet.

I am looking for the diagram/construction design for a 2-Meter (dual-band?) J-Pole antenna. I've lost mine during the course of moving and all I can recall is that one leg is 58", another leg at 19", resembling a J, using 450 ohm ladder line. (It needs to be portable/inconspicuous, that's why I'm referring to the ladder line version.)

Can anyone provide me with the necessary specs on constructing this antenna?

Thanks Ahead!
-73

+---+
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Unix Systems Programmer	Phone: (919) 515-2794
NCSU Administrative Computing Services	FAX: (919) 515-3787
+---+
| Ack! Thpppppfffffft!!!!   -Bill The Cat. |
+---+

Date: 9 Sep 93 22:32:46 GMT
From: ogicse!hp-cv!hp-pcd!hpspkla!depaul@network.ucsd.edu
Subject: VERTICAL DIPOLE ?
To: ham-ant@ucsd.edu

Hello.

Do vertical dipoles work better when they are ground mounted, or as high as possible??

Also, is the "counterpoise" really needed? I've used mine with/without the radials (only several for each band) and it doesn't make a difference.

Perhaps they should be elevated? (Any more than a couple and I'll see no difference in going back to a 1/4 wave vertical...)

Well, what do ya think?

Marc

Date: 9 Sep 1993 09:56:00 -0400
From: agate!howland.reston.ans.net!noc.near.net!news.delphi.com!news.delphi.com!not-for-mail@ames.arpa
To: ham-ant@ucsd.edu

References <26fs1g$afc@news.delphi.com>, <26ijmt$6eb@jericho.mc.com>, <m8pq14INN2l1@news.bbn.com>.d
Subject : Re: G5RV

levin@bbn.com (Joel B Levin) writes:

>Now instead of a long piece of coax to the antenna (lots of loss), or
>ladder line all the way to the tuner (low loss, so higher SWR doesn't
>matter so much), I'd have a lot of ladder line and a lot less coax, so
>I'd come out some where in between, maybe almost as good as using pure
>ladder line. So what (if anything) is wrong with this picture?

>Nets: levin@bbn.com

Joel, most antenna experts would advise you against an all-band antenna that is resonant on 80-meters. For center-fed Zeps, you want to stay away from resonance, but not too far away. The most popular lengths are 102' to 105' making them resonant between 4.4 and 4.6 MHz. You want all impedences to be something your antenna tuner can match and if your antenna is resonant, you are likely to get some super low or super high impedences after the transmission line transformation. Fully non-resonant antennas are better than what you described. With low-loss ladder-line, the SWR doesn't really matter as long as you can match it with an antenna tuner.

Best of 73s, Cecil, KG7BK

End of Ham-Ant Digest V93 #42
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